

Amendments to the Specification

Please replace the paragraph beginning page 2, line 11, with the following amended paragraph:

--It is also well known that to demount the tire the bead, i.e. the reinforced edge of the tire, it must previously be detached from the bead retention flange of the wheel rim.--

Please replace the paragraph beginning page 7, line 20, with the following amended paragraph:

--A bead release tool 6, commonly known as a blade, and positionable about a transverse axis 7, ~~is associated with~~ connected to the arm 2, by means known to the art, at a second end 5 distant from said first end 3.--

Please replace the paragraph beginning page 8, line 4, with the following amended paragraph:

--The wheel support surface 8 extends onto that portion of the base 4 ~~below~~ in front of the bead release tool 6 as a surface sufficient to receive that wheel portion concerned in the bead release.

Please replace the paragraph beginning page 8, line 7, with the following amended paragraph:

--As bead release requires a rather large force, of the order of 1500 kg, the arm 2 is made to approach and

withdraw from the bead of the tire ~~of which it is to be released,~~ by manipulator means.--

Please replace the paragraph beginning page 8, line 10, with the following amended paragraph:

--Advantageously, the function of said manipulator means is performed by a pneumatic cylinder-piston unit 10 having its piston rod 10a associated at ~~its upper~~ one end with a central region of the arm by mutual coupling means 11 of the known art, and its jacket 10b ~~housed~~ is supported within the base 4 (Figure 4).--

Please replace the paragraph beginning page 8, line 17, with the following amended paragraph:

--Essentially, whereas the base 4 is disposed vertically, the plane of swivel lies horizontally or inclined with respect to the ground.--

Please replace the paragraph beginning page 8, line 22, with the following amended paragraph:

--Specifically, on the base 4 there is a horizontally extending box casing 13 of elongate shape (~~Figure 4~~ Figure 4), on the opposite ends of which the vertically extending support surface 8 and the locking and release system 12 are respectively located.--

Please replace the paragraph beginning page 9, line 2, with the following amended paragraph:

--In practice, the locking and release system 12 is rotatably ~~associated with~~ connected to the first end 3 of the arm 2 by a pin 14 positioned on the first end of the arm, the pin 14 having its axis extending vertically, and is being associated with the base 4 via the box casing 13 (Figures 2 and 4), which is consequently interposed between said locking system 12 and the base.--

Please replace the paragraph beginning page 9, line 7, with the following amended paragraph:

--The arm 2 swivels about the axis of the pin 14 positioned on the first end 3 of the arm.--

Please replace the paragraph beginning page 9, line 9, with the following amended paragraph:

--The locking and release system 12 comprises a fork 15 extending from the box 13 and connected to the ~~rigid with~~ the first end 3 of the arm 2 via the pin 14 about which the arm 2 is free to rotate.--

Please replace the paragraph beginning page 9, line 12, with the following amended paragraph:

--With said fork 15 (Figure 5) a slider 16 is slidably associated, to slide within a slide chamber 17

provided between two superposed U-pieces, namely a ~~lower~~first U-piece 18 and an ~~upper~~a second U-piece 19.

Please replace the paragraph beginning page 9, line 15, with the following amended paragraph:

--One side of the ~~lower~~first U-piece 18 is associated with a prolongation of the base 4, the other side being associated with the box casing 13.--

Please replace the paragraph beginning page 9, line 17, with the following amended paragraph:

--The second ~~upper~~ U-piece 19 is associated with the first lower U-piece 18 by means of bolts 21 positioned on the sides, but leaving a space between the ~~two~~ first and second U pieces, said space forming the slide chamber 17.--

Please replace the paragraph beginning page 9, line 21, with the following amended paragraph:

--In the ~~upper~~second U-piece 19 an arched slot 22 (Figure 3) is provided, within which the slider 16 can freely slide.--

Please replace the paragraph beginning page 9, line 23, with the following amended paragraph:

--The slider 16 (Figure 5) presents an inverted T cross-section with its flat base 16a inserted in the chamber

17 and its longitudinal portion 16b passing through the slot
22 of the ~~upper~~second U-piece 19 and through a hole provided
in the fork 15.--

Please replace the paragraph beginning page 10, line
5, with the following amended paragraph:

-- The free~~upper~~ end of the longitudinal portion
16b of the slider 16 is provided with a thread on which a nut
24 is screwed to maintain the plate element 39 and the fork 15
irremovably joined together.--

Please replace the paragraph beginning page 10, line
22, with the following amended paragraph:

--When in its locked state, the flat base 16a of the
slider 16, slidably inserted into the slide chamber 17, abuts
against the inner surface of the second~~upper~~ U-piece 19 to
prevent the first end 3 of the arm 2 from moving relative to
the base 4 (Figure 5).--

Please replace the paragraph beginning page 11, line
6, with the following amended paragraph:

--This enables the ~~first end 3 of the arm 2~~ to be
moved.--

Please replace the paragraph beginning page 11, line 7, with the following amended paragraph:

--This movement is guided by the slider 16, which is limited to sliding within the slot 22- and by the axis of the rod 10a of the cylinder piston unit 10, which is the axis of rotation of the plane of swivel of the arm 2, ~~By virtue of this, the plane of swivel of the arm 2 rotates about an axis of rotation lying in said plane of swivel and~~ being positioned substantially perpendicular to said base 4.--

Please delete the paragraph on page 11, line 13-15, beginning "In the illustrated example of the present invention...".

Please replace the paragraph beginning page 11, line 16, with the following amended paragraph:

--Essentially, the plane within which the arm 2 acts is made to rotate ~~rotates~~ about the piston rod 10a of the cylinder-piston unit 10 by moving the second end 5 ~~first end 3~~ of the arm 2, ~~achieved and~~ by sliding the slider 16 within the slot 22 when the cam 25 is in its release position.--

Please replace the paragraph beginning page 12, line 15, with the following amended paragraph:

--Said joint 28 consists of a plate 29 provided with an aperture at its center, a first pair of sidepieces 30 and a

second pair of sidepieces 31, these pairs being mutually opposing and projecting ~~laterally and~~ perpendicularly to said plate 29.--

Please replace the paragraph beginning page 12, line 19, with the following amended paragraph:

--The sidepieces of said first pair 30 comprise ~~are prolonged behind the plate 29 by~~ two appendices 32.--

Please replace the paragraph beginning page 12, line 24, with the following amended paragraph:

--The first pair of sidepieces 30 is entirely contained within the box casing 13, whereas the second pair of sidepieces 31 lies on the outside of the side walls of the box casing 13, (Fig.3).--

Please replace the paragraph beginning page 13, line 3, with the following amended paragraph:

--In the second pair of sidepieces 31 (Figure 3) two holes are provided through which there are inserted two pins 34 rigid with the box 13 and coaxial with a first axis 35 extending substantially perpendicular to the plane of swivel of the arm 2, ~~i.e. vertically with respect to the ground~~.--

Please replace the paragraph beginning page 13, line 7, with the following amended paragraph:

--Said pins 34 enable the joint 28 and ~~piston rod 10a~~

~~of the~~ the-cylinder-piston unit 10 connected thereto to rotate about the first axis 35. This enables the piston rod 10a of the cylinder-piston unit 10 to lie ~~rigidly~~ within said plane of swivel while the arm is being moved away from and towards the base 4.--

Please replace the paragraph beginning page 13, line 15, with the following amended paragraph:

--Each tang 36 is provided with a threaded through hole through which a screw 37 is ~~rotatably~~ screwed-, the threadless end of which becomes inserted into a ~~blind~~ hole provided in each of the two appendices 32.--

Please replace the paragraph beginning page 13, line 18, with the following amended paragraph:

--The two screws are coaxial with a second axis 38 extending perpendicularly to the first axis 35 and substantially parallel to the plane of swivel of the arm 2. 7
~~i.e. horizontally with respect to the ground.~~--

Please replace the paragraph beginning page 13, line 24 with the following amended paragraph:

--This enables the piston rod 10a of the cylinder-piston unit 10 substantially to lie ~~rigid~~ within said plane of swivel during the movement of the first end 3 and the second end 5 of the arm 2.--

Please replace the paragraph beginning page 14, line 3 with the following amended paragraph:

--The rotations about said first and second axis can take place simultaneously, ensuring that the piston rod 10a can always follow the movement of the arm 2. ~~assumes an optimum position for effecting the bead release.~~--